

### **REMARKS**

The Final Office Action of May 31, 2006 has been carefully reviewed and these remarks are responsive thereto. Claims 1, 4-7, 9, 25, 26, 28-38 and 40-47 are pending. By this amendment, claims 1, 5, 29, 30, 32 and 45 are amended and claim 39 is cancelled. Claims 5 and 6 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,018,336 to Akiyama *et al.* ("Akiyama"). Claims 1, 7, 9, 25, 26, 28, 29, 31-38, and 41-47 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Akiyama in view of U.S. Patent No. 5,000,935 to Moran *et al.* ("Moran"). Claims 4 and 40 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Akiyama in view of Moran and in further view of U.S. Patent No. 5,612,719 to Beernick (Beernick). Claims 30 and 39 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Akiyama in view of Moran in further view of U.S. Patent No. 5,625,833 to Levine *et al.* ("Levine"). Reconsideration and allowance of the instant application are respectfully requested in view of the above amendments and arguments made herein.

### **Interview with the Examiner**

Applicants' representatives would like to express their appreciation for the time the Examiner spent discussing the rejections of this case. During the interview, the parties discussed the 35 U.S.C. § 112 rejection, the 35 U.S.C. §102 rejection and the 35 U.S.C. §103 rejection.

Regarding the 35 U.S.C. § 112 rejection, no agreement was reached however Applicants now have a better understanding of the concerns of the Examiner and believe the remarks below address the issues noted by the Examiner during the interview. Regarding the rejection under 35 U.S.C. § 102 and §103, Applicants have made clarifying amendments in the pending claims that are believed to address the concerns raised by the Examiner during the interview. For example, claim 1 now recites "a control key function" to clarify that the control key function of claim 1 is not any controlling function as the Office Action appears to have construed the term.

### **Objection to the Claims**

The Office Action objected to claims 1, 28-30 and 45 and requested that the term "made by the user" be included after the phrase "predetermined gesture" to provide further clarification.

While Applicants believe the claims were sufficiently clear as written, claims 1, 28-30 and 45 have been amended to recite the requested “made by the user” so as to provide even greater clarity.

Regarding the requested change of a digitizing pen to a stylus, Applicants respectfully submit that a digitizing pen may be used to provide a stylus input and the term is supported in the specification. Therefore, the term “digitizing pen” is believed to be proper and Applicants respectfully decline to amend the claims.

In view of the above, withdrawal of the objections to the claims is respectfully requested.

### **Amendment to the Claims**

Claims 1, 5, 28-30, 32 and 45 have been amended to clarify and more distinctly point out the intended scope of the claimed subject matter. No new matter has been added by these amendments.

In particular, claim 1, 28-30, and 45 have been amended to recite “by the user” as requested by the Office Action for the purpose of further clarifying the claims.

Claim 1 has been further amended to recite “a control key function” and support for this amendment was at least found in the specification as filed in page 15. While this meaning was believed inherent in the prior language, as this feature was previously recited and considered with respect to claim 34, no new search or consideration is needed to consider this feature and entry of this minor amended is therefore respectfully requested.

Claim 5 has been further amended to recite “control key function” and support for this amendment is at least found in the specification as filed on page 15. As this feature was previously recited and considered with respect to claim 34, no new search or consideration is needed to consider this feature and entry of this minor amended is therefore respectfully requested.

Claim 32 has been further amended to recite “determining whether the first stylus input is preceded by a particular in-air gesture,” incorporating a feature of now cancelled claim 39 into the independent claim 32. As the Office Action has previously considered this feature when considering claim 39, no new issues are raised by the amendment and entry of this minor change is respectfully requested.

**Rejection under 35 U.S.C. § 112, ¶ 1**

Claims 1, 4-7, 9, 25, 26 and 28-47 were rejected under 35 U.S.C § 112, ¶ 1 as failing to comply with the written description requirement. In particular, the Office Action suggested that the feature “sending a mouse button event modified by the selected function” as recited in claim 1, for example, was not described in the specification as filed so as to reasonably convey that Applicants had possession of the claimed invention at the time of filing.

In response, Applicants note that the specification as filed explains that “[t]he present invention also provides a way for an electromagnetic pen digitizer to precisely emulate the functional behavior of a two-button mouse-type computer input device.” (Specification as filed, pg. 5). The specification further explains that:

The functional behavior of a two-button mouse to be emulated by the pen and the MIP includes positional information, and an actuation signal for each button of the two buttons (i.e., left- and right- button down events). Also, two keyboard keys (SHIFT and CTRL) commonly used for modifying the functional behavior of the two buttons of mouse input device can be actuated using the MIP of the invention. Accordingly, an application program that is designed to operate with input from a two-button mouse input device and, therefore, expects a variety of mouse events can be operated using a digitizing pen without modification of the application program.

(Specification as filed, pg.12). Thus, the specification as filed makes it plain that aspects of the present invention allow a user to simulate the use of a conventional mouse, including the use of modifier keys such as the Shift key or the Control key, that are known to be used to modify the functional behavior of mouse buttons.

The specification further explains that in an embodiment, “the default event that is sent to an application when the pen touches the writing surface is a “left button down” event.” (Specification as filed, pg. 13). The specification further explains when a UI element is displayed, the CTL, SHIFT, ALT and BULL’S-EYE may be displayed in the UI element. (Specification as filed, pg. 15). The specification further explains that the user may select one of the modifiers CTL, SHIFT and ALT and “[w]hen one or more of the modifiers CTL 302, SHIFT 303 and ALT 304 is active and a user taps in the pen tip within BULL’S-EYE 305, UI 300 sends a right click event plus the modifier(s) to the window immediately below BULL’S-EYE 305.”

(Specification as filed, pg. 15). Plainly, this discloses sending a mouse button modified by the selection function. The specification further explains that “When a user taps on one of CTL 302, SHIFT 303 and ALT 304 buttons of UI 300, the selected button flashes, thereby indicating activation. On the next pen down on, for example, a soft keyboard button or any area outside MIP window, UI 300 sends the modified mouse message and deactivates the modifier.” As the specification explains that in an embodiment the default result is a left button down, this plainly discloses sending a modified left button mouse event and in an embodiment the event is plainly sent in response to a second stylus input.

During the interview, the Examiner suggested that the following portion suggested that left button down event was not disclosed:

Preferably, the default event that is sent to an application when the pen touches the writing surface is a “left button down” event. When the pen touch is preceded by a selected in-air gesture, no “left button down” event is sent. Instead, the UI is displayed preferably near the pen tip.

(Specification as filed, pg. 13-14). However, Applicants respectfully submit that the Office Action’s interpretation of this section of the specification misreads the specification. This section is merely discussing an embodiment where the predetermined gesture can trigger the displaying of the UI element. As explained above and described on pages 14-16 of the specification as filed that follow the above quoted portion of the specification, once one of the modifiers is selected, a modified mouse button event can be sent for both the right and the left mouse button. Thus, the specification as filed plainly provides support for sending modified mouse button. Furthermore, this section of the specification merely refers one aspect of the invention where the gesture triggers the UI, however the specification further explains that “an in-air gesture according to the present invention can be used for generating specific keystrokes” (specification as filed, pg. 19) and therefore in an alternative embodiment the in-air gesture could plainly be used to directly provide the control key function, the shift key function or the alternate key function.

Applicants respectfully submit that the Office Action’s argument about being the mouse events being preprogrammed does not seem related to the claimed features. The claim language at issue recites “sending...” not “modifying...,” therefore even if the specification did not

disclose modifying a mouse event, and Applicants respectfully submit that it does, the specification plainly discloses sending a modified mouse event. Furthermore, Applicants are puzzled as to how a mouse could function at all if the functionality was not preprogrammed. Even in a conventional keyboard and mouse system the functionality of each key and button is preprogrammed and it is still possible to send a modified mouse button event by pressing a modifier key first.

In summary, Applicants respectfully submit that the above cited sections more than adequately convey that the Applicants were in possession of the claimed subject matter at the time of filing. Accordingly, withdrawal of this ground of rejection is respectfully requested.

**Rejection under 35 U.S.C. § 102(e) - Akiyama**

Claims 5 and 6 were rejected under 35 U.S.C. § 102(e) as being anticipated by Akiyama. Independent claim 5 recites “displaying a user interface having a plurality of selectable functions including at least one function selected from the list consisting of a shift function, a control key function, and an alternate function.” While the prior Examiner admitted that Akiyama did not disclose the recited functions, the current Office Action suggested that Akiyama does disclose these features by suggesting that the move, right click and help functions that Akiyama discloses are a move control function, a right click control function and a help control function. As discussed in the interview, this appears to read the feature “control function” as recited in the claim 1, for example, as being a “controlling function.” Plainly the specification refers to the control function as the function associated with the control key. However, to further clarify that the control function is the control function referred in the specification, Applicants have amended claim 1 so that it recites “control key function.” Applicants respectfully submit that the control key function as recited in claim 1 cannot be equated with functions disclosed in Akiyama because, at most, Akiyama merely discloses a bar that has a move control function, a right click control function and a help control function. As Akiyama plainly fails to disclose the recited feature, Akiyama fails to disclose the above recited step and therefore fails to disclose all the limitations of claim 5. As Akiyama does not disclose all the limitations of claim 5, Akiyama cannot be said to anticipate claim 5.

Claim 6 depends from claim 5 and is not anticipated for the reasons discussed above and for the additional features recited therein.

Accordingly, withdrawal of this ground of rejection is respectfully requested.

**Rejection under 35 U.S.C. § 103(a) – Akiyama & Moran**

Claims 1, 4, 7, 9, 25, 26, 28-38, and 40-47 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Akiyama in view of Moran, either alone or in further combination with Levine or Beernink. Claims 1 and 32 are independent.

Regarding independent claim 1, for reasons similar to the reasons discussed above with respect to claim 5, Akiyama fails to disclose the feature of “displaying a user interface having a plurality of selectable functions including at least one function selected from the list consisting of a shift function, a control key function, and an alternate function.” The Office Action has not suggested that Moran corrects this deficiency, nor does Moran appear capable of doing so. Therefore, as the combination of Akiyama and Moran fail to disclose all the features of claim 1, the combination cannot be said to support a *prima facie* case of obviousness with respect to claim 1.

Claims 4, 7, 9, 25-26, 28-31 and 45-46 depend from claim 1 and are patentable over the references of record for at least the reasons discussed above and for the additional features recited therein. For example, claims 25-26 recite a feature similar to the feature “displaying step displays said user interface at a location on a digitizing writing surface that depends upon a location of a digitizing pen” recited in claim 25. While admitting that Akiyama fails to disclose this, the Office Action suggests it would be obvious to use the teaching of Moran to modify Akiyama. However, Applicants respectfully submit that such a modification does not make sense. Akiyama discloses an icon that when selected provides a menu. Nothing in Akiyama or Moran suggests that the icon should be moved around, indeed the Office Action admits the icon is static; therefore there is no reason to change the position of the resultant pop-up menu. Indeed, by moving the pop-up menu the user would actually have to travel further from the point where the icon was selected to the pop-up menu. Thus, the Office Action’s reasoning cannot be said to support modifying Akiyama with Moran to reach the claim features. In addition, claim 46 recites the feature of “wherein the stylus input is a tap.” If the Office Action suggests that

tapping on the icon is the stylus input, than there is no reason to check for a predetermined gesture because Akiyama discloses that simply tapping on the icon causes the pop-up menu to appear. Indeed, Applicants cannot find any reason disclosed by Akiyama or Moran that would provide support for the concept of checking for a predetermined gesture once the user taps on the icon disclosed in Akiyama. This is because Akiyama automatically displays the pop-up menu when the user taps on the icon and any check for a predetermined gesture would appear to be pointless based on the disclosure of Akiyama and Moran. Furthermore, the Office Action suggests that Moran, Col. 2., Ln. 10-14 discloses the predetermined gesture before a stylus input. Even if Moran could somehow be used to modify Akiyama, Moran plainly fails to disclose a predetermined gesture before a tap input and instead at most discloses a gesture that ends with the stylus being lifted.

Independent claim 32 recites the features of “determining whether the first stylus input is preceded by a particular in-air gesture” and “responsive to determining that the first stylus input is preceded by the particular in-air gesture, displaying a graphical user interface including a user-selectable keyboard function.” The Office Action admits that Akiyama fails to disclose the stylus input preceded by a predetermined in-air gesture, thus Akiyama necessarily cannot disclose these steps. Looking at Moran, Applicants have been unable to locate any mention of in-air gestures. The Office Action suggested, however, that Levine discloses in-air gestures (in reference to now cancelled claim 39). However, Applicants respectfully submit that the addition of Levine does not help the Office Action’s position.

As an initial matter, nothing in Akiyama supports modifying the process disclosed by Akiyama to perform these two steps, even if one assumes that Levine does disclose in-air gestures. This is because Akiyama discloses providing an icon that, when selected, causes a pop-up menu to be displayed. Therefore, there is no reason to check what was done before the icon was selected because there is no need to determine whether the pop-up menu should be displayed; instead selecting the icon by itself automatically causes the pop-up menu to be displayed. Conversely, if the icon is not selected, the pop-up menu is not displayed. Therefore, any attempt to modify the icon selection process disclosed by Akiyama to reach the subject matter claimed in claim 32 does not make sense. Indeed, Applicants cannot find anything in any of the cited references that provides any support for modifying the icon selection process of

Akiyama by first checking to see if a predetermined gesture was made prior to the icon being selected. Instead, Akiyama discloses providing an icon that, if selected, will cause a pop-up menu to be displayed. Therefore, it is unclear from the disclosure of Akiyama, Moran or Levine how or why one should or could modify the system of Akiyama.

Furthermore, Applicants have been unable to find anything in any of the cited references that discloses checking whether a predetermined in-air gesture preceded a stylus input. Levine fails to disclose such a step and merely discloses that in-air gestures exist. The Office Action appears to be suggesting that Akiyama can be modified by Moran, once Moran is modified by Levine. However, Applicants respectfully submit that such a tiered modification of references (using A to modify B and then using the modified B to modify C) is improper and contrary to established precedent that allows an obviousness type rejection by using a base reference and modifying the base reference with other references. Furthermore, the Office Action has provided no support for making such a double modification, even if it was proper. For example, it is unclear how the gesture referenced in Col. 2, Ln. 10-14 of Moran could be replaced with a predetermined in-air gesture because then lifting the stylus off the contact surface would not be possible. Instead, Applicants respectfully submit that it is only with improper hindsight reconstruction that the references can be combined to reach the present invention and even then the combination does not make sense because there is no reason to check for predetermined gestures when an icon is provided as disclosed by Akiyama. Therefore, for at least the above reasons the references of record fail to disclose all the features of claim 32, therefore the references of record cannot be said to support a *prima facie* case of obviousness. Accordingly, claim 32 is patentable over the references of record.

Claims 33-38, 40-44 and 47 depend from claim 32 and are therefore nonobvious in view of the references of record for at least the above reasons discussed with respect to independent claim 32 and for the additional features recite therein. For example, claim 37 recites "wherein the first stylus input is a tap of the stylus on a touch-sensitive display." Even if the Office Action could somehow support the modification of Akiyama with Moran and Levine, the Office Action is suggesting that the predetermined gesture before the stylus input is the gesture referred to in Col 2, Ln. 10-14 of Moran that occurs before the stylus is lifted. Plainly, however, if the first stylus is a tap, than Moran fails to disclose this feature because this section of Moran does not



Application No.: 09/801,929  
Amendment dated July 17, 2006  
Reply to Office Action of May 31, 2006

disclose a gesture preceding a tap stylus input and therefore cited references cannot be said to support a *prima facie* case of obviousness for this additional reason.

Accordingly, withdrawal of this ground of rejection is respectfully requested.

### **CONCLUSION**

All objections and rejections having been addressed, Applicants submit that the instant application is in condition for allowance, and respectfully request prompt notification of the same. Should the Examiner feel that a telephone call would expedite prosecution, the Examiner is invited to contact the undersigned at the number below.

Respectfully submitted,

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Dated: July 17, 2006

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